Title (en)
SYSTEM AND METHOD FOR RECEIVED SIGNAL PREDICTION IN WIRELESS COMMUNICATIONS SYSTEM

Title (de)
SYSTEM UND VERFAHREN ZUR EMPFANGSSIGNALPRÄDIKTION IN DRAHTLOSEN KOMMUNIKATIONSSYSTEMEN

Title (fr)
SYSTÈME ET PROCÉDÉ DE PRÉVISION DE SIGNAL RECU DANS UN SYSTÈME DE COMMUNICATION SANS FIL

Publication
EP 1404175 B1 20100623 (EN)

Application
EP 02806583 A 20020517

Priority
- US 0215583 W 20020517
- US 86070701 A 20010517

Abstract (en)
[origin: US7433384B2] Method and apparatus to compute the combiner coefficients for wireless communication systems for a space-time solution. One embodiment trains the weights on a signal known a priori that is time multiplexed with other signals, such as a pilot signal in a High Data Rate, HDR, system, wherein the signal is transmitted at full power. A Minimizing Mean Square Error, MMSE, approach is applied allowing weight combining on a per path basis. The weights are calculated as a function of a noise correlation matrix and spatial signature per path. The noise correlation matrix is determined from an autocorrelation matrix of the received signal. In one embodiment, the MMSE approach is applied to a non-time gated pilot signal.

IPC 8 full level
H04B 7/02 (2006.01); **H04B 7/08** (2006.01); H04B 1/7105 (2011.01)

CPC (source: EP KR US)
H04B 7/08 (2013.01 - KR); **H04B 7/0848** (2013.01 - EP US); H04B 1/71055 (2013.01 - EP US); H04B 7/0851 (2013.01 - EP US); H04B 7/0854 (2013.01 - EP US); H04B 7/0857 (2013.01 - EP US); Y02D 30/70 (2020.08 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
US 2003031234 A1 20030213; **US 6990137 B2 20060124**; AT E472195 T1 20100715; AU 2002365239 A1 20030902; BR 0209807 A 20060207; CN 100518008 C 20090722; CN 101383633 A 20090311; CN 101383633 B 20160525; CN 101494472 A 20090729; CN 101494472 B 20140820; CN 1533641 A 20040929; CN 1921325 A 20070228; CN 1921325 B 20110810; DE 60236797 D1 20100805; EP 1404175 A2 20040407; EP 1404175 B1 20100623; JP 2005515738 A 20050526; JP 2009260968 A 20091105; JP 2013062817 A 20130404; JP 5575859 B2 20140820; KR 100915044 B1 20090902; KR 100945100 B1 20100302; KR 20040002968 A 20040107; KR 20090041454 A 20090428; TW 564608 B 20031201; US 2006120439 A1 20060608; US 7433384 B2 20081007; WO 03061380 A2 20030731; WO 03061380 A3 20031009

DOCDB simple family (application)
US 86070701 A 20010517; AT 02806583 T 20020517; AU 2002365239 A 20020517; BR 0209807 A 20020517; CN 02814388 A 20020517; CN 200610126147 A 20020517; CN 200810160903 A 20020517; CN 200910128122 A 20020517; DE 60236797 T 20020517; EP 02806583 A 20020517; JP 2003561336 A 20020517; JP 2009098595 A 20090415; JP 2012227290 A 20121012; KR 20037014981 A 20020517; KR 20097007428 A 20020517; TW 91110384 A 20020517; US 0215583 W 20020517; US 32859006 A 20060109